

Sigma002

Factor-based intraday trading strategy

Contents

- Strategy & System features
- Performance
- Backtest vs Live trading P&L comparison
- Risk & Rewards
- Further developments
- How to get connected

Strategy features

- Long/short factor strategy
 - Long/short equal weighted strategy
 - Technical indicators only: Moving average, Momentum, Volatility etc
- Top ranked selector
 - Only top N stocks are traded (even if signal picks up more stocks)
- Intraday holding: each trade held for one day only
 - No borrowing cost / overnight charges
 - Avoid corporate actions / economic events
- Risk adverse strategy
 - Not everyday is traded / strategy filters out unsuitable market conditions
 - Low trading costs / turnover

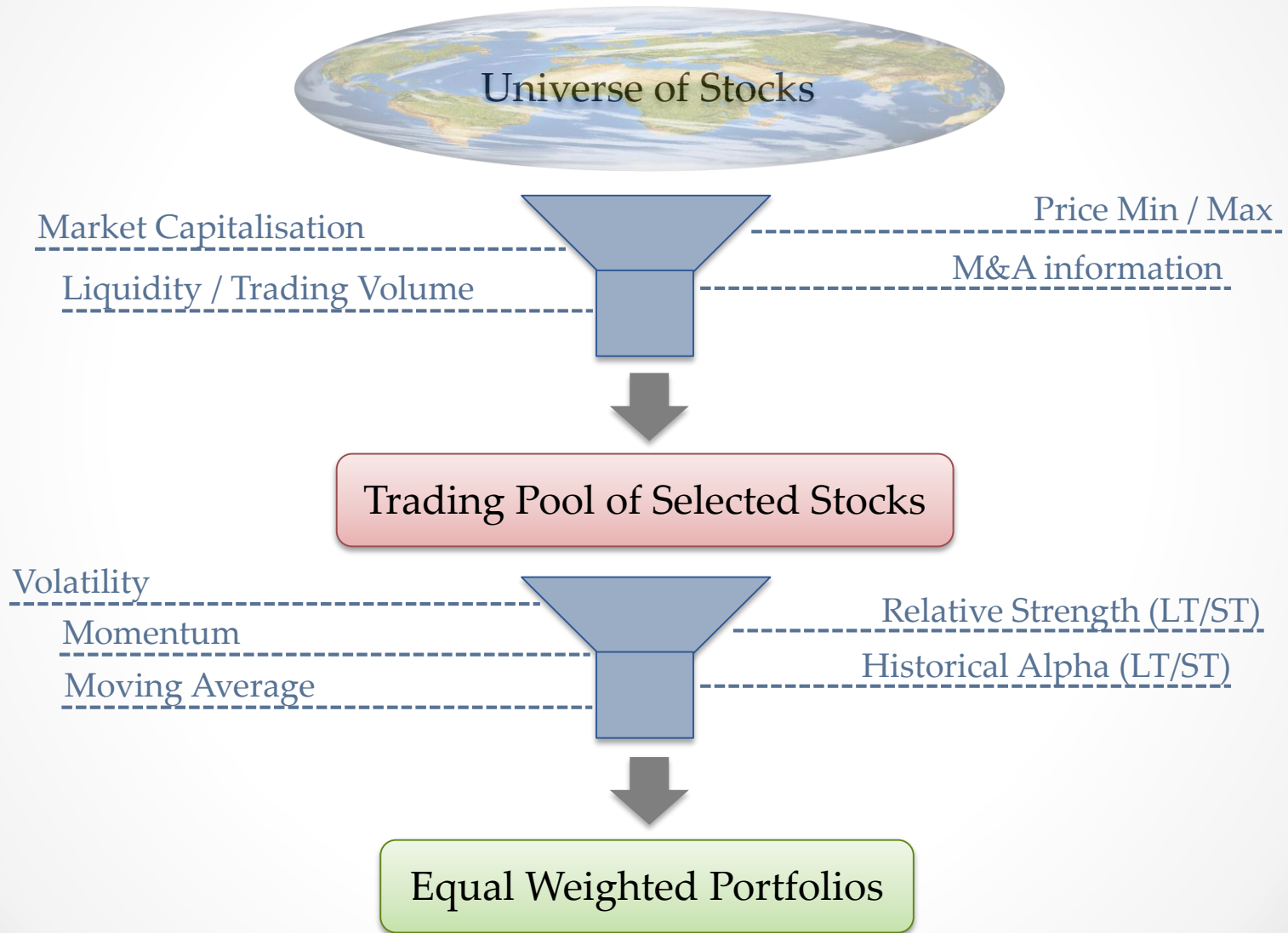
System features

- Low latency
 - Trades get executed instantly <1s
- Easy account setup and connection
 - Works like a “multi-socket plug adaptor”
- Rapid pre-trade analysis
 - Live updating of trading signals and rapid trade decisions
- Robustness

System diagram

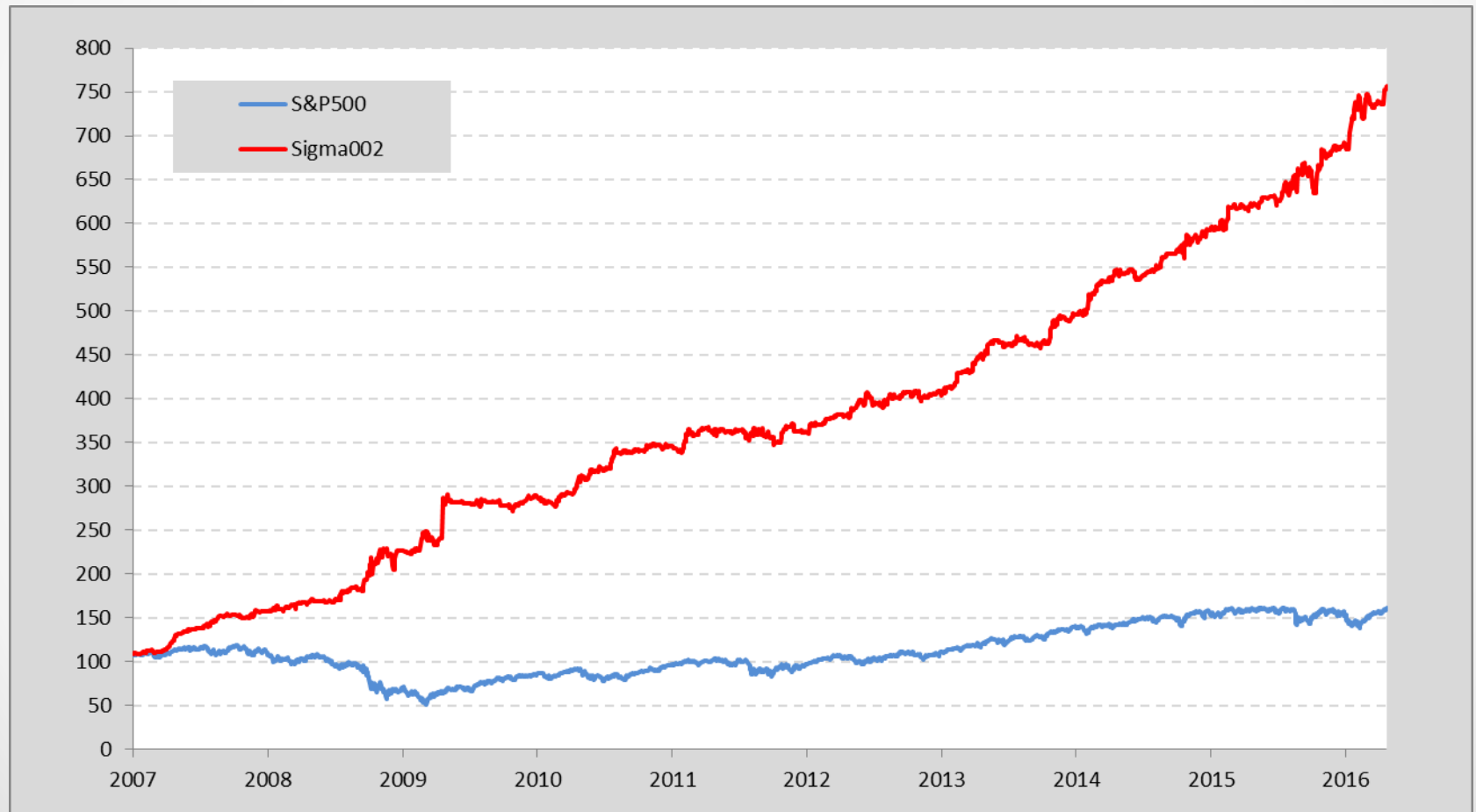
ANNUAL REVIEW

MONTHLY REVIEW



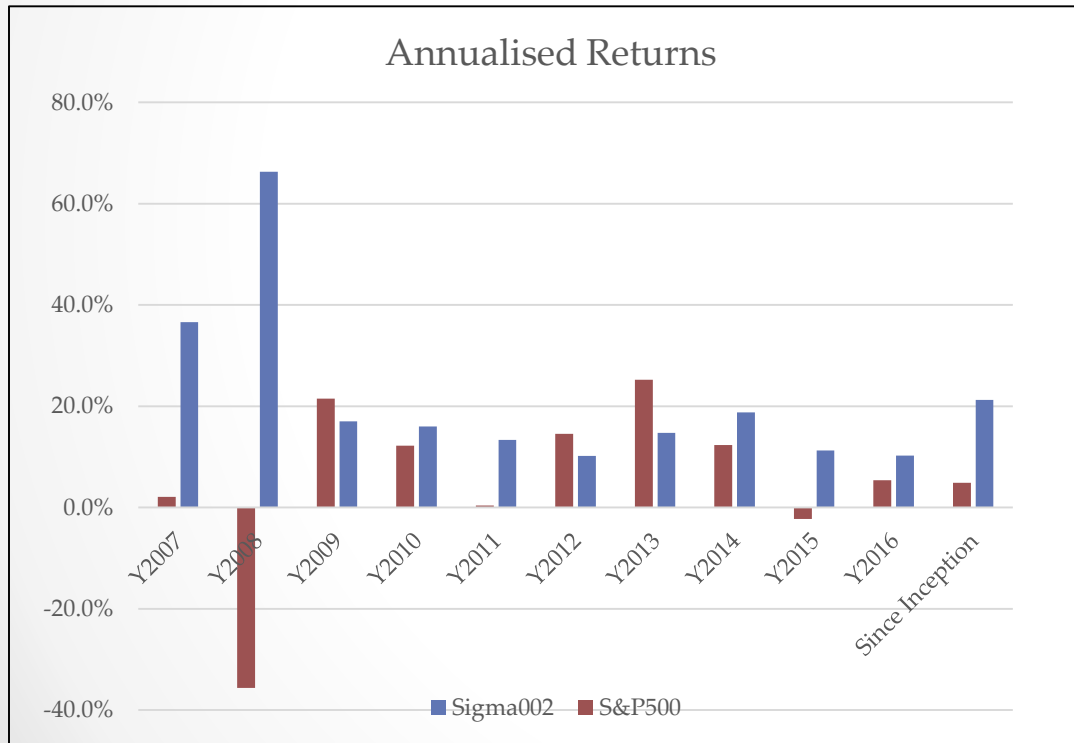
Performance

- Sigma002 vs S&P500 from 2007 - Present



Performance

- Sigma002 delivers consistent returns over past 10 years and significantly outperforms S&P500.



Annualised Return	Sigma002	S&P500
Since Inception	21.3%	4.9%
Y2016	10.3%	5.4%
Y2015	11.3%	-2.2%
Y2014	18.8%	12.3%
Y2013	14.7%	25.2%
Y2012	10.2%	14.6%
Y2011	13.3%	0.4%
Y2010	16.0%	12.2%
Y2009	17.0%	21.5%
Y2008	66.3%	-35.6%
Y2007	36.6%	2.1%

Performance

- Sigma002 has a significantly **higher sharp ratio** and **lower maximum drawdown** vs S&P500.

Sharpe Ratio: measures risk-adjusted return, the higher the better

Maximum Drawdown: maximum loss from peak portfolio value at any point in time

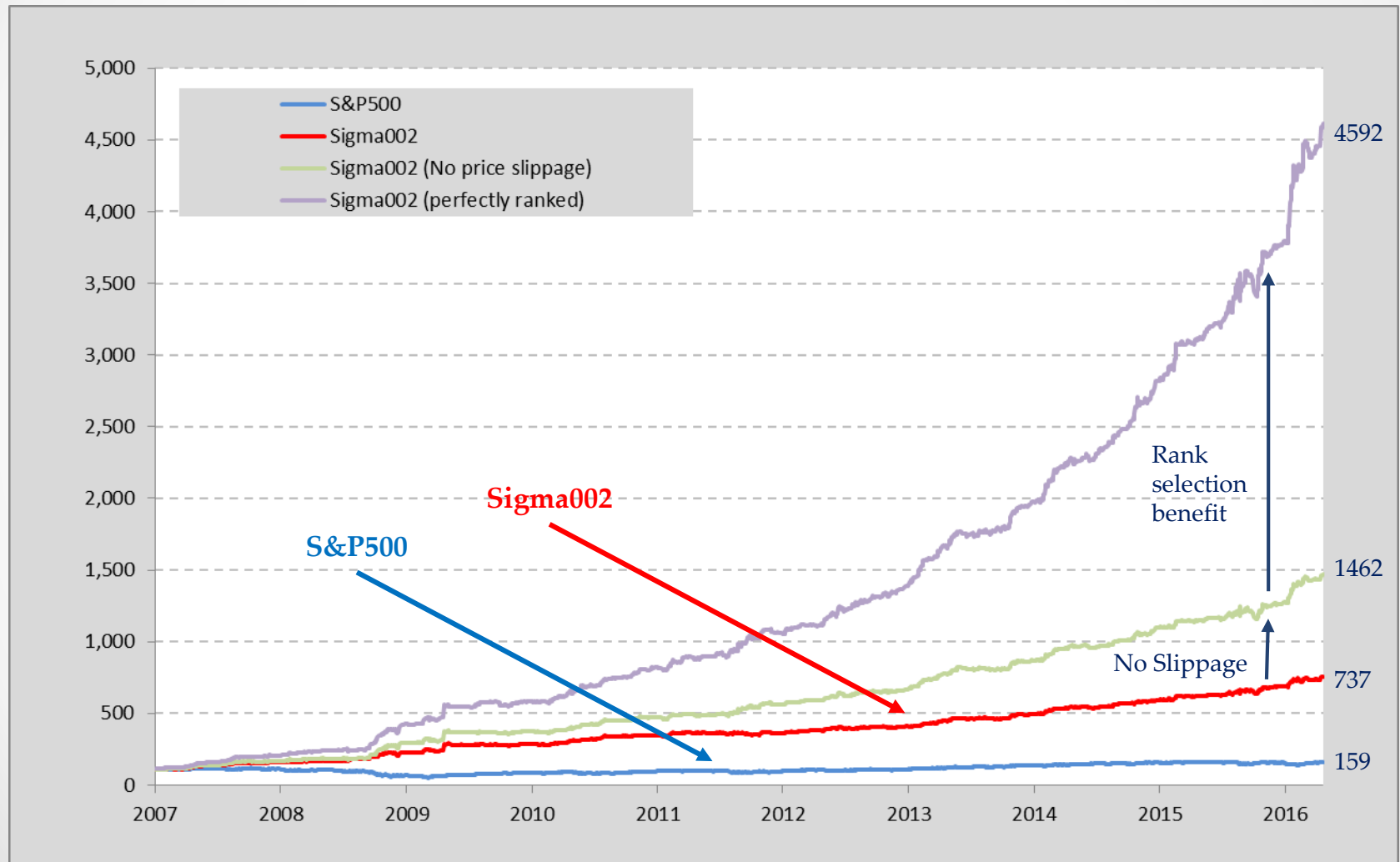
Sharp Ratio	Sigma002	S&P500	Difference
Since Inception	1.9	0.3	1.6
Y2016	3.2	1.1	2.2
Y2015	1.2	-0.1	1.3
Y2014	3.2	1.1	2.2
Y2013	2.8	2.1	0.7
Y2012	1.6	1.1	0.5
Y2011	1.3	0.1	1.2
Y2010	2.3	0.7	1.6
Y2009	1.2	0.9	0.4
Y2008	2.5	-0.9	3.4
Y2007	3.9	0.2	3.7

Max. Drawdown	Sigma002	S&P500	Difference
Since Inception	9.1%	56.8%	-48%
Y2016	2.4%	9.3%	-7%
Y2015	6.7%	12.4%	-6%
Y2014	1.5%	7.4%	-6%
Y2013	2.2%	5.8%	-4%
Y2012	3.7%	9.9%	-6%
Y2011	2.8%	19.4%	-17%
Y2010	2.7%	16.0%	-13%
Y2009	5.8%	27.6%	-22%
Y2008	9.1%	47.2%	-38%
Y2007	3.0%	10.1%	-7%

Reliability of Backtest Results

- Above backtested result not purely based on statistical simulation
- Microstructure market conditions have been factored in i.e. three major factors accounted for:
 - **Price slippage:** Live trading price is not or never is the same price as obtained from historical data. This is so-called price slippage.
 - **Opportunity costs:** Simulation assumes that all trades are fully filled or executed. However, trades in live conditions are not always fully filled or executed due to market volume and volatility.
 - **Ranked selection:** In Sigma002, we trade top N stocks based on our trading rules. However, ranking stocks is imperfect in an intraday live market as trading signals might not be received simultaneously.

Reliability of Backtest Results



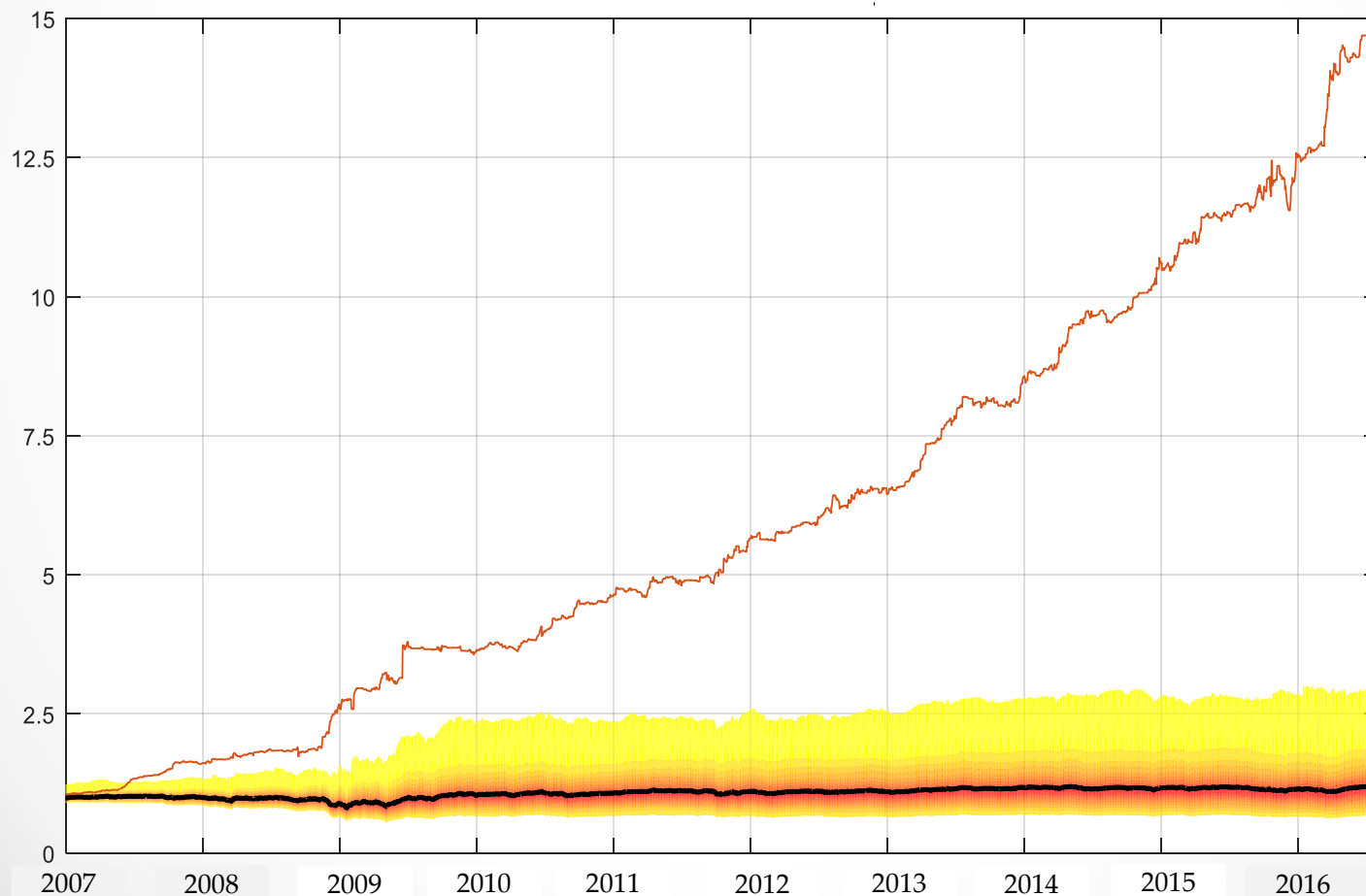
Reliability of Backtest Results

- Empirical evidence states that the live trading strategy sharp ratio is generally 1.0 less than the simulation.
- Sigma002 simulation results proves this observation.

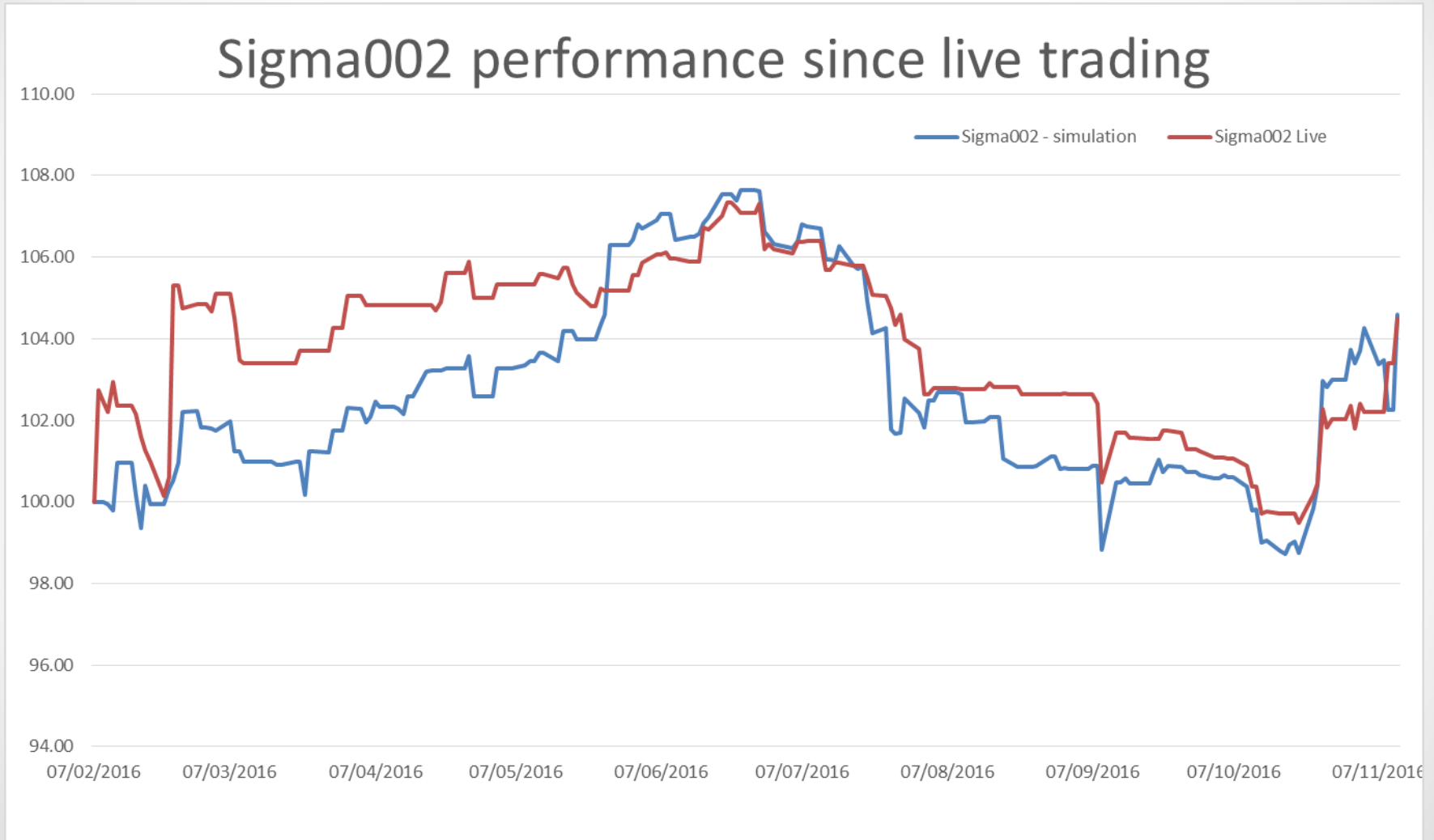
Since Inception	Annualised Return	Sharp Ratio	Maximum Drawdown
Sigma002 (perfectly ranked)	47.0%	2.90	8.8%
Sigma002 (No price slippage)	31.0%	2.17	9.1%
Sigma002	21.3%	1.93	9.1%

Sigma002 vs Monkey strategy

- Sigma002 is not just because of luck.



Live trading performance since Feb16



Recent traded stocks

Few number of traded stocks daily means:

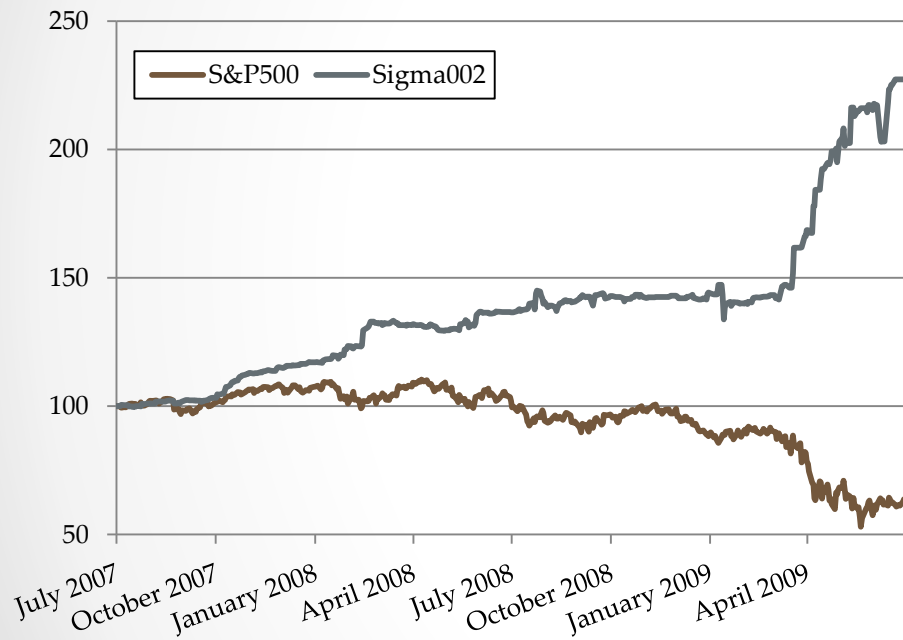
- More concentrated alphas
- Lower trading costs

Date	Stock 1	Stock 2	Stock 3	Stock 4
20/04/2016	CCE	HAS	TEL	
21/04/2016	EXPD	UA		
22/04/2016	ISRG	SLB		
25/04/2016				
26/04/2016				
27/04/2016	COF	TGNA	DPS	
28/04/2016	ABC	ALLE	BLL	BWA
29/04/2016	CNC			
02/05/2016				
03/05/2016	PNC	TMK		
04/05/2016				
05/05/2016				
06/05/2016				

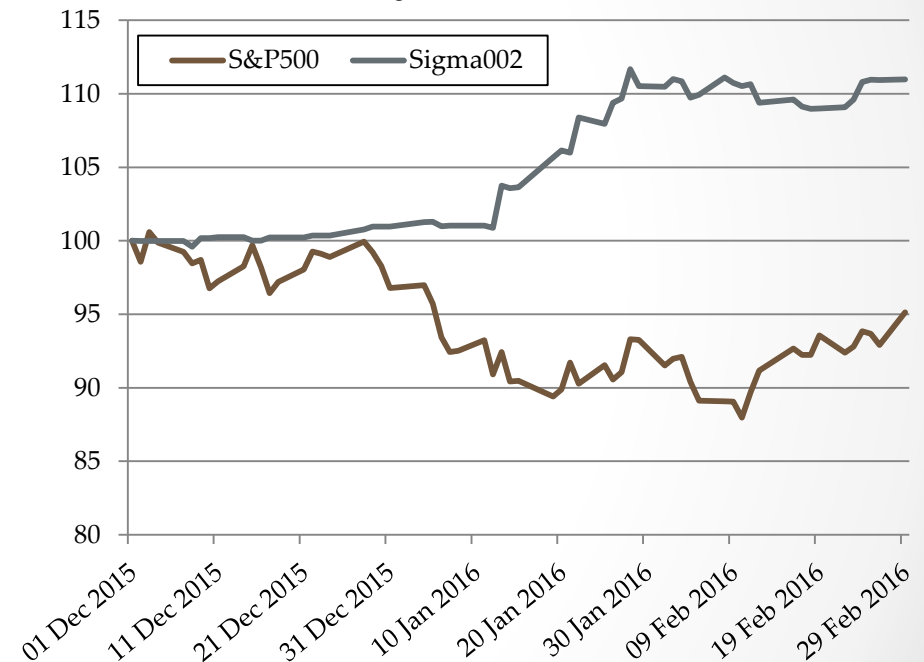


Sigma002 under stressed condition

2008-2009 Financial Crisis



January 2016 Sell-off



Question:

How much return can Sigma002 yield?

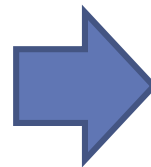
- Answer: depends on your risk tolerance.

Scenario 1: you can bear loss suffered in 2008 Financial Crisis

Sigma002	Annualised Return	Sharp Ratio	Maximum Drawdown
Since Inception	21.3%	1.93	9.1%
2016 Apr	10.3%	3.25	2.4%
Y2015	11.3%	1.23	6.7%

S&P500	Annualised Return	Sharp Ratio	Maximum Drawdown
Since Inception	4.9%	0.33	56.8%
2016 Apr	5.4%	1.10	9.3%
Y2015	-2.2%	-0.07	12.4%

6.3X



Sigma002	Annualised Return	Maximum Drawdown
Since Inception	132.9%	56.8%
2016 Apr	64.3%	15.0%
Y2015	70.6%	42.0%

How much return can Sigma002 yield?

Scenario 2: I can only bear 25% loss in my cumulative investment.

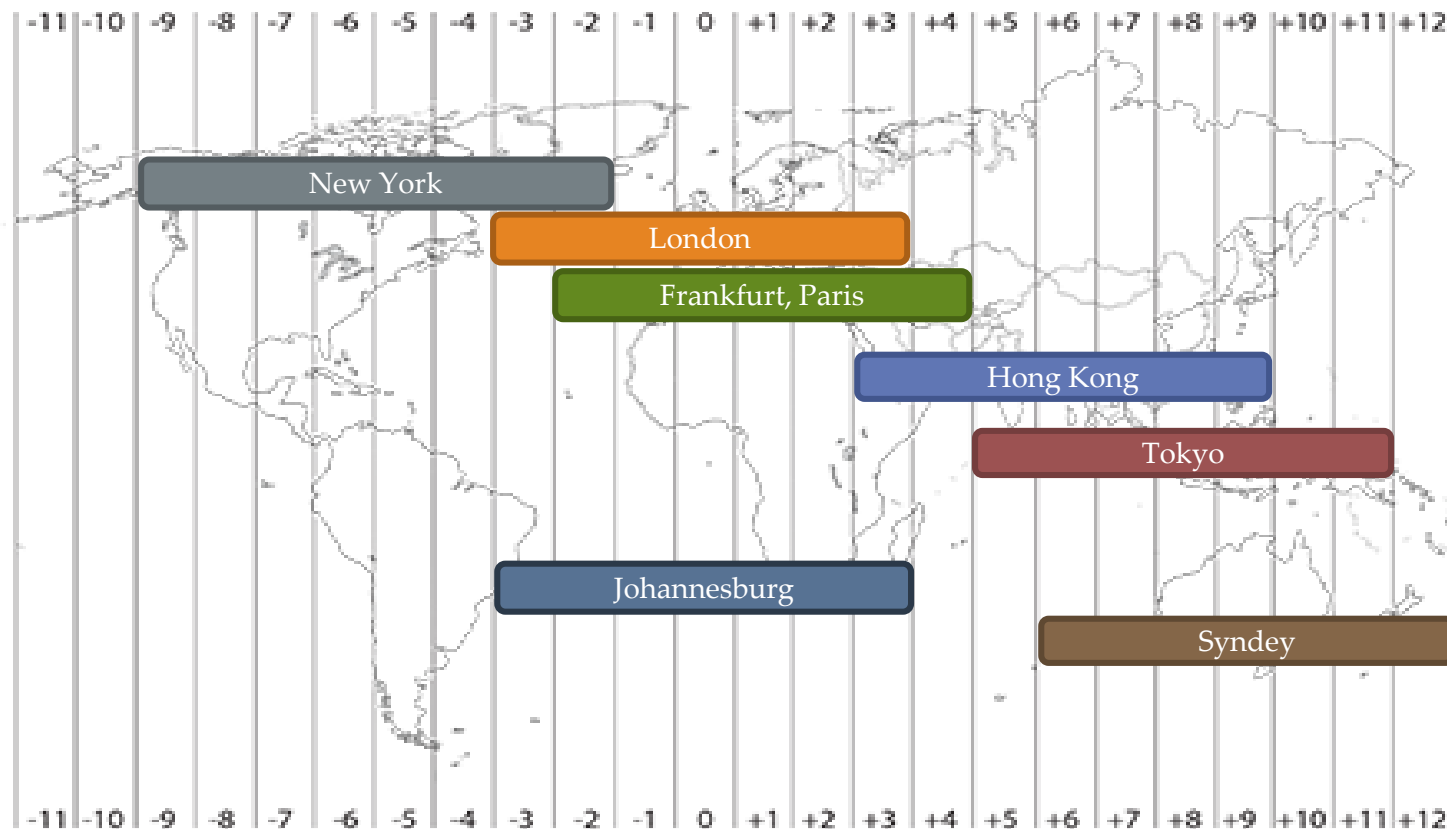
Sigma002	Annualised Return	Sharp Ratio	Maximum Drawdown
Since Inception	21.3%	1.93	9.1%
2016 Apr	10.3%	3.25	2.4%
Y2015	11.3%	1.23	6.7%



Sigma002	Annualised Return	Maximum Drawdown
Since Inception	58.4%	25.0%
2016 Apr	28.3%	6.6%
Y2015	31.1%	18.5%

Further expansion to global markets

Money Never Sleeps



Investment Platform

- Our investment platform



Interactive Brokers

The Professional's Gateway to the World's Markets

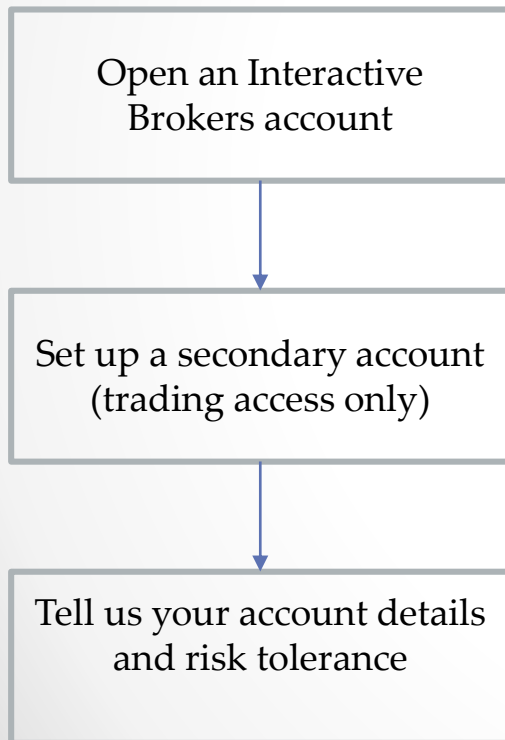
Interactive Brokers is the largest U.S. online brokerage firm

- Global access to 24 countries' equity markets
- By far the broker which provides the lowest trading cost
- Advanced IT framework with high execution and platform reliability
- Transparent and comprehensive reporting
- Provides detailed and sophisticated portfolio risk management

Account Type	Cash Account	Reg. T Margin Account	Portfolio Margin Account
Cash requirement	\$ 10,000.00	\$25,000.00	\$100,000.00
Leverage	No leverage	Up to 4X	4 ~ 8X

How to get connected

A few simple steps to let Sigma002 make money for you



Ready!

Sigma002

